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(54) PRODUCTION OF POLYURETHANE

(57)Abstract

PURPOSE: To obtain the subject polymer having excellent biodegradability, flexibility, elasticity and durability and suitable as medical materials such as artificial skin by reacting a lactide-type polyol obtained by a specific method with an organic diisocyanate.

CONSTITUTION: A lactide-type polyol is produced by the ring-opening polymerization of a hydroxy compound having ≥ 2 hydroxyl groups (e.g. ethylene glycol and bisphenol A) and a lactide (e.g. D-lactide or L-lactide) in the presence of a catalyst (preferably composite metal cyanide complex catalyst) preferably at 0-150° C. The lactide-type polyol is made to react with an organic diisocyanate (e.g. phenylene diisocyanate) and optionally a chain extender having a low molecular weight to obtain the objective polymer. The amount of the catalyst to be used in the production of the lactide-type polyol is preferably 100-1,500ppm based on the initiator used in the reaction.